

ABSTRACT

A highly pure ultra-fine SiO_x (wherein x is from 0.6 to 1.8) powder having a specific surface area of at least $10 \text{ m}^2/\text{g}$ and a total content of Na, Fe, Al and Cl of at most 10 ppm is provided. The SiO_x powder is produced by reacting a monosilane gas with a gas capable of oxidizing the monosilane gas in a non-oxidizing gas atmosphere under a pressure of from 10 to 1000 kPa at a temperature of from 500 to 1000°C . In this case, the amount of the non-oxidizing gas is preferably larger than the total amount of the monosilane gas and oxygen participating in the oxidation of the gas capable of oxidizing the monosilane gas.